## STUDIES IN THE HYDNOCERINI (COL.). THE HYDNOCEROID GENERA.

BY EDWARD A. CHAPIN, M.S.

After a careful study of a large collection of the insects heretofore included under the genus *Hydnocera* Newman, it has become evident that certain of the species differ from *H. pallipennis* Say, that species being the type of *Hydnocera*, to an extent which warrants the erection of genera to include them. In the characterization of the genus by Lacordaire (Gen. Col., IV, 471) the ungues are stated to be "appendiculate, their basal portion tooth-like."

In Hydnocera pedalis Leconte and its related species, sobrina Fall and parviceps Schaeffer, and in the group of species allied to curtipennis Newman (longicollis Ziegl.), the ungues are simple, but slightly thickened at the base. In these groups, however, the structure of the antennæ differs widely and considering the uniformity of structure as seen throughout the two large groups, the pallipennis and the curtipennis groups, a second division is made on the antennal characters.

The genera may be distinguished from one another by the following table:

Third segment of antennæ about twice as long as broad, cylindrical; prothorax much longer than broad ..........Isohydnocera gen. nov.

Third segment of antennæ as broad or broader than long; trapezoidal; prothorax subequilateral ............Wolcottia gen. nov.

Isohydnocera gen. nov.—Body very elongate; head short, vertical; eyes prominent, finely granulate, entire or minutely emarginate near antennal insertion; terminal segment of maxillary palpi cylindro-conical, that of labial palpi large, triangular; mandibles with a tooth near apex on the inside. Antennæ II-segmented, first segment thick, moderately long and somewhat arcuate, second short, globose, third to ninth cylindrical, longer than broad, tenth very large, forming with the eleventh a compact club which is much thicker than the ninth segment. Prothorax distinctly longer than broad, nearly cylindrical, lateral dilation weak. Elytra broader

than the thorax, shorter than the abdomen, attenuate or parallel and truncate, lateral margins and usually tips strongly serrate. Legs long and thin, tarsi with five segments, the first covered by the second from above, segments two, three and four bearing lamellæ beneath, ungues long and thin, simple. Type species: Hydnocera curtipennis Newman.

To this genus are to be assigned the following species: I. curtipennis Newman (longicollis Ziegl.), tabida Lec., schusteri Lec., ornata Wolc., gerhardi Wolc., pusilla Schaeff., ægra Newm., brunnea sp. nov., and albocincta Horn.

Isohydnocera brunnea sp. nov. Very elongate, form of ægra Newm. Brown, eyes black. Head sparsely and finely punctured, the punctures on the vertex being connected by fine grooves, surface otherwise smooth, very sparsely pubescent. Thorax much longer than wide (ratio of length to breadth is 40–32), apical transverse impression wide and shallow, basal deeper, section of thorax between impressions subglobose, lateral foveæ deep and distinct but small, surface except for a few punctures smooth, very slightly alutaceous toward hind angles. Scutellum brown, sparsely pubescent. Elytra elongate, suture nearly closed, apices very sharply truncate and tumid, lateral margins serrate, surface moderately densely and coarsely punctured, the punctures becoming more coarse toward apex, although nearly obsolete on the tumid portion of the tips. Pubescence sparse, erect and pale. Underparts brown, posterior halves of meso- and metapleuræ densely pubescent with pale hairs. Legs long and slender, the posterior tibiæ somewhat arcuate, brown. Length 4.8 mm.

Type locality: Riley Co., Kansas. Type in the collection of Kansas Agricultural College. This species is closely allied to agra Newm. but is separated from that species by the nearly smooth thorax and by the different thoracic ratio. The thorax in agra Newm. is finally alutaceous all over and has a ratio of

## 32 = 25.

Wolcottia gen. nov. Body elongate, slightly attenuate posteriorly. Head short, front flat, lateral margins slightly concave to accommodate eyes, which are not prominent, finely granulate and minutely emarginate as in *Isohydnocera*. Labrum broad, entire. Mandibles falciform, with a small internal tooth near apex. Terminal segment of maxillary palpi conical, as long or slightly longer than the preceding, that of the labial palpi very large, triangular. Antennæ short and stout, II-segmented; first segment slightly longer than broad, second nearly spherical, third to eighth as long as broad, trapezoidal, becoming progressively broader, ninth broader than long, nearly as wide as tenth, tenth and eleventh forming an oval mass nearly as long as the three preceding segments. Thorax slightly broader than long, sides feebly dilated, slightly narrower than the head with eyes. Elytra at humeri broader than the head across eyes, attenuate poste-

riorly, tips rounded separately and with irregular margins. Legs long and thin, hind femora reaching beyond the tips of the elytra, tarsi of five segments, the first covered by the second from above, second, third and fourth bearing lamellæ beneath. Ungues long and thin, simple or but slightly thickened. Type species: Hydnocera pedalis Leconte.

The three species assigned to this genus, *W. pedalis* Lec., sobrina Fall, and parviceps Schaeffer, have antennæ which seem to be midway between the three-segmented club type of Lemidia Spinola and the two-segmented club type of Hydnocera Newman. This genus is dedicated to Mr. Albert B. Wolcott, Chicago, Ill., the recognized authority on North American Cleridæ. I wish to thank Mr. Wolcott for his unbounded generosity in placing at my disposal his entire collection of these genera, but for which I should have been unable to make the observations recorded above. Thanks is also due Dr. J. H. Merrill, of Kansas Agricultural College, for the use of the Clerid material of that institution

## THREE NEW CHALCID FLIES FROM NORTH AMERICA.

By A. A. GIRAULT, Glenn Dale, Md.

Elachistus sanninoideæ new species.

Female: In the table of species runs to hyphantriæ Crawford but differs in that all the coxæ are black, the abdomen is entirely black except slightly above at base and the mandibles are dentate (six teeth). Scape dusky at tip, the flagellum black. Club 2-jointed, not nippled. The male is similar but the yellow area on the abdomen is distinct (basal fourth except the margins) and the scape is concolorous and foliaceously dilated ventrad.

One male, four females reared from the pupa of Sanninoidea exitiosa at Fayetteville, Arkansas, July 23 (G. Becker).

Types: Catalogue No. 20758, U. S. National Museum, one male, four females on tags, a male and female head and female hind legs on a slide.

Secodes multilineatus new species.

Female: Similar to Secodella viridis Crawford but smaller by a half and the tips of the tibiæ are plainly white, the knees nar-